

WHAT IS CLAIMED IS:

1. method of cracking a derelict product having a shell covering a core, said shell having opposed front and rear faces and a sidewall extending between said faces, said sidewall having at least one pair of diagonally opposed corner-edges extending transversely between said faces, said shell being separable along said sidewall into a pair of covers, each said cover including one of said faces and a part of said sidewall, said method comprising:

placing said pair of diagonally opposed corner-edges of said sidewall in alignment with a nest axis;

following said placing, impacting said shell at one corner-edge of said pair of diagonally opposed corner-edges with sufficient force to separate said covers;

maintaining said alignment with said nest axis during said impacting;

collecting said covers and said core; and
sorting out said core.

2. The method of claim 1 further comprising:

aligning said front and rear faces with a transverse axis prior to said supporting, said transverse axis being perpendicular to said nest axis; and

maintaining said alignment with said transverse axis during said impacting.

3. The method of claim 1 further comprising sweeping in a direction away from said axes following said impacting.

4. The method of claim 1 further comprising, during said impacting, directly supporting said shell near one corner-edge of said pair of diagonally opposed corner-edges.

5. The method of claim 1 further comprising impelling said

derelict product into said alignment with said nest axis.

6. The method of claim 5 wherein said impelling further comprises dropping said derelict product and, following said dropping, catching said derelict product in an inclined nest.

7. The method of claim 5 wherein said impelling is at a velocity insufficient to cause bouncing of said derelict product.

8. The method of claim 1 further comprising, during said impacting, gripping said faces of said shell.

9. The method of claim 1 wherein said core is a circuit board.

10. The method of claim 1 wherein said sorting follows said collecting.

11. A method of cracking a derelict product having a shell covering a core, said shell having opposed front and rear faces and a sidewall extending between said faces, said sidewall having at least one pair of diagonally opposed corner-edges extending transversely between said faces, said shell being separable along said sidewall into a pair of covers, each said cover including one of said faces and a part of said sidewall, said method comprising:

loading said derelict product on a transporter;
during said loading, setting said faces in an orientation transverse to a transport direction of said transporter;

dropping said derelict product into a nest;
during said dropping, maintaining said transverse orientation;
impacting said shell at one of said corner-edges with sufficient force to separate said covers;

supporting another, diagonally opposed one of said corner-edges in

said nest during said impacting;

sweeping said nest clear of said derelict product following said impacting.

12. The method of claim 11 wherein said corner-edges define a nest axis following said dropping and said method further comprises, during said impacting, holding said derelict product in alignment with a transverse axis perpendicular to said nest axis.

13. The method of claim 11 wherein said sweeping is in a direction outward from said nest and transverse axes.

14. The method of claim 11 wherein said impelling further comprises dropping said derelict product at a maximum velocity insufficient to cause bouncing of said derelict product in said nest.

15. A derelict product cracker comprising:
a V-block defining a nest axis, said V-block having a pair of supports, said supports being inclined at different angles to said nest axis;
a ram facing said supports, said ram having a near position adjoining said V-block and a far position at a greater separation from said V-block than said near position, said ram being rapidly movable from said far position to said near position, said ram being aligned with said nest axis in said near position.

16. The cracker of claim 15 wherein said ram is rapidly movable from said far position to said near position along said nest axis.

17. The cracker of claim 15 further comprising a sweep operatively disposed to clear said V-block.

18. The cracker of claim 17 wherein said ram and said sweep are

synchronized in alternation.

19. The cracker of claim 17 wherein said sweep further comprises a plurality of passages extending through said V-block and a pressurized gas supply connected to said passages.

20. The cracker of claim 19 wherein one of said supports further comprises a pivotable flap overlying said passages.

21. The cracker of claim 15 wherein one of said supports is inclined at an angle of between 20 and 40 degrees to said nest axis.

22. The cracker of claim 21 wherein the other of said supports is inclined at an angle of between 50 and 70 degrees to said nest axis.

23. The cracker of claim 15 wherein one of said supports is inclined at an angle of between 25 and 35 degrees to said nest axis, the other of said supports is inclined at an angle of between 55 and 65 degrees to said nest axis, and said supports together define an angle of between 85 and 95 degrees.

24. The cracker of claim 15 wherein one of said supports is inclined at an angle of about 30 degrees to said nest axis, the other of said supports is inclined at an angle of about 60 to said nest axis and said supports together define an angle of about 90 degrees.

25. The cracker of claim 15 further comprising a bumper laterally adjoining said supports.

26. The cracker of claim 25 further comprising a clamp jaw disposed opposite said bumper, said clamp jaw being movable toward and away from said bumper in synchrony with said ram.

27. A derelict product cracker comprising:

a ram movable rapidly from a far position to a near position, said ram defining a ram axis;

a nest closely adjoining said ram when said ram is in said near position, said nest having first and second supports defining first and second intersecting planes, respectively, said planes meeting at said ram axis, said planes each being inclined relative to said ram axis;

a sweep operatively disposed to clear said nest, said sweep and said ram being synchronized.

28. The cracker of claim 27 wherein said first plane is inclined relative to said nest axis, at about double the angle of said second plane.

29. A cracker nest comprising:

a V-block defining a nest axis, said V-block having a side support inclined at an angle of 25 to 35 degrees to said nest axis and an end support inclined at an angle of 55 to 65 degrees to nest axis, said supports together defining an angle of 85 to 95 degrees.

30. The nest of claim 29 wherein said side support extends farther outward from said axis than said end support.

31. The nest of claim 30 wherein said side support has a plurality of gas passages.

32. The nest of claim 30 further comprising an L-shaped bumper laterally adjoining said supports.

33. The nest of claim 32 further comprising a clamp jaw disposed opposite said bumper, said clamp jaw being movable toward and away from said

bumper.